

**CONFERENCE OF THE EIGHTEEN-NATION COMMITTEE
ON DISARMAMENT**

THE UNIVERSITY
OF MICHIGAN

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FINAL VERBATIM RECORD OF THE ONE HUNDRED AND FIFTH MEETING

Held at the Palais des Nations, Geneva,
on Wednesday, 6 March 1963, at 10.30 a.m.

Chairman:

Mr. A.A. de MELO FRANCO

(Brazil)

PRESENT AT THE TABLE

Brazil:

Mr. A.A. de MELO FRANCO
Mr. R.L. ASSUMPCAO de ARAUJO
Mr. Frank da COSTA

Bulgaria:

Mr. M. TARABANOV
Mr. G. GUELEV
Mr. V. IZMIRLIEV
Mr. G. YANKOV

Burma:

Mr. J. BARRINGTON
U MAUNG MAUNG GYI

Canada:

Mr. E.L.M. BURNS
Mr. S.F. RAE
Mr. A.E. GOTLIEB
Mr. R.M. TAIT

Czechoslovakia:

Mr. K. KURKA
Mr. V. PECHOTA
Mr. V. VAJNAR
Mr. A. MIKULIN

Ethiopia:

Lij Mikael IMRU
Ato M. HAMID
Ato M. GHEBEYEHU

India:

Mr. A.S. MEHTA
Mr. S.B. DESHKAR

Italy:

Mr. F. CAVALLETTI
Mr. A. CAVAGLIERI
Mr. C. COSTA-REGHINI
Mr. P. TOZZOLI

PRESENT AT THE TABLE (Cont'd)

Mexico:

Mr. L. PADILLA NERVO
Miss E. AGUIRRE
Mr. J. MERCADO

Nigeria:

Mr. M. T. MBU
Mr. L. C. N. OBI

Poland:

Mr. M. BLUSZTAJN
Mr. E. STANIEWSKI
Mr. W. WIECZOREK
Mr. A. SKOWRONSKI

Romania:

Mr. G. MACOVESCU
Mr. E. GLASER
Mr. N. ECOBESCU
Mr. C. NEDA

Sweden:

Mrs. A. MYRDAL
Baron C. H. von PLATEN
Mr. S. LOFGREN
Mr. E. CORNELL

Union of Soviet
Socialist Republics:

Mr. S. K. TSARAPKIN
Mr. A. A. ROSHCHIN
Mr. I. G. UŞACHEV
Mr. P. F. SHAKHOV

United Arab Republic:

Mr. S. AHMED
Mr. M. KASSEM
Mr. S. E. IBRAHIM

PRESENT AT THE TABLE (Cont'd)

United Kingdom:

Sir Paul MASON

Mr. J.G. TAHOURDIN

Mr. D.N. BRINSON

Mr. R.C. BEETHAM

United States of America:

Mr. C.C. STELLE

Mr. D.E. MARK

Mr. V. BAKER

Mr. R.A. MARTIN

Special Representative of the
Secretary-General:

Mr. O. LOUTFI

Deputy Special Representative
of the Secretary-General

Mr. M.A. VELLIODI

The CHAIRMAN (Brazil) (translation from French): I declare open the one hundred and fifth plenary meeting of the Conference of the Eighteen-Nation Committee on Disarmament.

Before calling on the first speaker, the representative of Burma, I would inform you that one of our co-Chairmen, Mr. Tsarapkin, the Soviet representative has asked to speak on a question of procedure.

Mr. TSARAPKIN (Union of Soviet Socialist Republics) (translation from Russian): I should like to speak now, not in my capacity as co-Chairman, but as the representative of the Soviet Union.

Before the Committee begins discussing the questions before it, I should like to draw attention to the following. At the very beginning of the informal meeting of the Committee on 4 March, the representative of the United States proposed on his own initiative that delegations should not give any information about that meeting to the press. This proposal was adopted, and the Soviet delegation conscientiously and scrupulously abode by the Committee's decision. No information appeared in the Soviet press or was given on the Soviet radio concerning what happened or what was said at that meeting. However, in the press of the United States and other Western countries -- I am referring in particular to The New York Times, The New York Herald Tribune, Le Monde, the United Press International Agency and others -- there appeared on the very next day, 5 March, reports of the contents of the statements made by the representatives of various countries, including the representative of the Soviet Union. Moreover, these reports were, as usual, tendentious. The position of the United States and the United Kingdom was presented in an embellished form and the Soviet position was misrepresented.

The Soviet delegation, which loyally observed the Committee's decision adopted at the suggestion of the United States representative, found itself deliberately placed in the worst conditions for informing international public opinion of the Soviet position. We draw the Committee's attention to this fact, and reserve our right to draw the appropriate practical conclusions.

Mr. STELLE (United States of America): It was the United States delegation that proposed that there should be no briefing of the press on the discussions at our informal meeting. The United States delegation was under strict instructions, and I am sure that those instructions were carried out. There was no briefing of the press by any member of my delegation.

It seems to me that there has to be a distinction made. We undertook not to brief the press, and we did not brief the press. But the United States delegation -- or, for that matter, the United States Government -- cannot control what the press says on its own initiative. We cannot undertake to be responsible for what appears in the American press. We did fully abide by our agreement not to brief the press.

Mr. TSARAPKIN (Union of Soviet Socialist Republics) (translation from Russian): Then miracles are happening here. The United States representative says that there was no briefing of the press by any member of his delegation, yet information has been published in the United States press -- in fact, such information as could not have been available to the press unless it had been told what actually happened in the informal meeting of the Committee. Therefore your explanation, Mr. Stelle, has not made the situation any clearer, and what I have said regarding the conclusions we are compelled to draw in this respect remains valid.

Mr. STELLE (United States of America): I do not need to repeat my statement, because it was accurate in every respect.

The CHAIRMAN (Brazil) (translation from French): I now call on the representative of Burma.

Mr. BARRINGTON (Burma): As an initial participant in the work of the Eighteen-Nation Committee on Disarmament, I was happy indeed when my Government directed me to rejoin the Committee when it resumed its work earlier this month. I regret that my responsibilities elsewhere did not permit me to be here for the beginning of the session, but I came as soon as I could. Since then I have tried to bring myself abreast of developments within the Committee. It has taken me

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longer than I expected. Even now I am far from sure that I have things sorted out properly. In the words of a popular song, I find myself somewhat "Bewitched, Bothered and Bewildered". But whatever I may be, I wish to make one thing clear: I am not despondent. Despite the depressing character of our recent meetings, I remain cautiously optimistic. I remain optimistic partly because, in dealing with the cessation of nuclear tests, pessimism is synonymous with despair, and partly because, if we look at the record, I believe there is in fact reason for cautious optimism.

Mr. Chairman, you and I and most of our colleagues around this table today were present here when the Eighteen-Nation Committee met for the first time almost a year ago. If we throw our minds back to the situation which existed at that time with regard to the cessation of nuclear tests, and compare it with the situation which exists today, we cannot fail to notice the revolution -- yes, I use the word advisedly -- which has taken place. Furthermore, it is a revolution which has overtaken both sides in this nuclear confrontation.

A year ago, the United States and the United Kingdom were still insisting on an international system of control, based on internationally manned and operated observation posts scattered all over the world, including the territories of the nuclear Powers. That system of control prescribed a sliding scale of twelve to twenty on-site inspections per annum, the actual number depending on the number of unidentified events which might occur on the territory of each of the nuclear Powers in the course of any given year. As against that, the Soviet Union rejected any possibility of international control, insisting that the existing national detection systems were sufficient to detect and identify all nuclear tests. As a corollary to that, the Soviet Union refused to permit any on-site inspection on its territory. It is difficult to conceive of two positions which were further apart. If ever there was room for despair it was then. Yet there was no despair. Thanks to the efforts of the Committee -- and here I hope I shall not be considered immodest if I mention the special role of the eight non-aligned countries, with a powerful assist from Canada -- the impasse was broken.

I do not propose to weary my colleagues by cataloguing subsequent stage-by-stage developments within the Committee. But I do suggest that the situation which

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prevails today with regard to the cessation of nuclear tests bears little resemblance to that of a year ago. A year ago there was no common ground whatsoever between the great nuclear Powers with regard to the elements of a nuclear test ban treaty. Today, there is considerable though not yet clearly defined common ground. Indeed, the ground that is agreed is greater than the ground that is still to be agreed. There seems to be agreement that basic reliance in the policing of a test ban should be placed on national systems; that the proper operation of the national systems should be monitored by automatic seismological installations; that an international scientific commission should be set up to receive and evaluate data furnished to it by the national networks; and on acceptance of the principle of compulsory on-site inspection, to determine the origin of selected doubtful events.

If today we tend to become lost -- and I must confess that I do tend to become lost on occasions -- among the numbers which have come to play such a big part in our daily lives, I think it is well to cast a glance backward and to survey the long and painful road which we have already traversed. I do not at all wish to belittle the difficulties which lie ahead, but I do wish to help induce a sense of perspective.

Despite our immediate difficulties and frustrations, let us remember that in all the nine-year history of man's struggle to bring about a cessation of nuclear testing we have never been closer to the goal than we are today, and that most of the road to that goal has been covered during the year that has passed. Therefore, let us continue to search doggedly, with perseverance, and above all with patience. Let us always remember that the world would have absolutely nothing to gain and everything to lose if we were to give in to despair and relax our efforts.

For the progress which has been made we have to be grateful both to the Soviet Union and to the United States and the United Kingdom. Both sides have taken long strides forward to bring us to the present situation. We appreciate their sacrifices. We know that it was not easy for the Soviet Union to agree that its national detection posts should furnish data to the international scientific commission; we know that it was difficult for it to agree that the working of those posts should be monitored by automatic seismic recorders placed inside its territory; and we know that its acceptance of the principle of on-site inspection represents a major concession which, in our view, establishes beyond all doubt

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that it is anxious to come to an agreement on the cessation of nuclear weapon tests. Similarly, we know that it was not easy for the United States to abandon its previous insistence on an international control system based on internationally manned and staffed observation posts, and to agree to place its basic reliance on national systems; and we believe too that the progressive scaling-down of its proposed quota of on-site inspections from the original figure of twenty to the present figure of seven also shows beyond any doubt that the United States too is anxious to come to an agreement on the cessation of nuclear weapon tests.

The tragedy is that, having come so far, they both seem exhausted and in need of a pause to take breath. If that will help them to reach the goal in a final spurt, no one will be more overjoyed than the Burmese delegation. But if, having come so far, they fail to take the last few steps required to save themselves, and to answer the anxious prayers of an expectant and watchful world, it will be made plain for all to see that the responsibility is theirs and theirs alone.

The sad thing is that, if today the Conference finds itself in something of a difficulty, it is not, as we see it, because of basic principles. Those have already been agreed on. However, there remain some major decisions still to be taken, among them the number of automatic seismological boxes to be installed in and around the territories of the nuclear Powers and how they are to function; the number of on-site inspections to be carried out on each of their territories; and generally, how these are to be conducted. Even here we are not entirely without guide-lines.

With regard to the automatic seismic boxes, both sides agree, on a scientific bases, that they are required. There is a difference of opinion between them about the number required, which may in turn be linked to their functions; but, since the overall basis is agreed and the existing difference is small, it should not be too difficult to reach agreement on the automatic seismic boxes.

When we turn to the question of on-site inspections, the problem is complicated by the fact that, on their own showing, the two sides approach this question on two somewhat different planes, one political and the other politico-scientific. Thus, although the figures of the two sides have approached each other in recent weeks, and are now tantalizingly close, the fact that they are on different planes means that it is difficult to close the gap without the two planes themselves being drawn together. In other words, it seems to my delegation that in regard to

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on-site inspection it would be difficult to come to agreement on numbers without an understanding being reached simultaneously on the fundamentals -- I repeat, on the fundamentals -- of the modalities of inspection; and it is our hope that the nuclear Powers will soon agree on a procedure which will enable them to overcome that difficulty.

And now a word about general procedure. From time to time it has been suggested that the Conference, in view of the difficulties which immediately attend current discussion of the cessation of nuclear testing, should set it aside for the time being and pass on to the discussion of some other subject. Alternatively it is suggested that it might continue to be discussed, but in parallel with one or more other topics. My delegation is strongly opposed to any such course of action. As we have had occasion to state before, we do not underrate the importance of general and complete disarmament or of the collateral measures. We believe they must be tackled and solved before mankind can be relieved of the dread of nuclear annihilation. But first things come first. And the cessation of nuclear tests comes first because we are already so far down the road to an agreement. Not only we but the entire world knows it, and no amount of explanation would convince the world that we were not running away from our responsibilities if we turned to something else at this stage.

Such suggestions might at least have some merit if there were any prospect of progress with regard to these other topics, but we all know that that is a vain hope. The failure to reach agreement on a nuclear test ban, after having got so close to it, will act as a drag on all our discussions, and we shall eventually wind up with a whole succession of stalled discussions resulting, as Mr. Burns said last Friday, "in a final loss of confidence in the Eighteen-Nation Committee on Disarmament" (ENDC/PV.104, p.30). On the other hand, an agreement to cease nuclear testing would put fresh heart into the entire Conference. Therefore, painful and frustrating though it be, we must persevere in our efforts to effect a break-through in the nuclear test ban negotiations.

And lastly, I should like to end with an expression of hope. As I think I have said before in this Committee, nuclear tests cannot in our view be reconciled with negotiations on a nuclear test ban. They inevitably add considerably to our difficulties and even make our negotiations somewhat unreal. Consequently I should like to think that the protracted United States underground series which commenced

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in September 1961 has now been terminated, and that the conclusion of a test ban agreement in the near future will mean that we have put an end to all tests for all time.

Mr. MACOVESCU (Romania): During the plenary meeting of our Committee on 25 February the Romanian delegation, commenting upon certain facts and data (ENDC/PV.102, pp. 5 et seq.), reached the conclusion that the achievement of a nuclear test ban agreement is a political and not a technical, scientific or arithmetical issue. At the same time we stressed that at the present stage of our negotiations the solution does not rest with scientists and their research work but depends on the desire, resolve and political courage of the United States Government.

Have we, between 25 February and the present time, witnessed any significant change in the attitude of the Western nuclear Powers which would testify to their willingness to conclude now, within the shortest possible time, the agreement which we have been negotiating for so long and which is hopefully expected by hundreds of millions of people all over the world?

It has often been stated in this Committee -- the Romanian delegation also has made such statements -- that never in the already long history of the negotiations have the two parties come closer to each other, that never has the signing of an agreement been possible to a larger extent than it is now. The Soviet Government took the decisive step and showed the world once again that it is deeply concerned with the present and future fate of humanity, that it bases its political decisions on the demands of the Soviet peoples and on the demands of all peoples everywhere. The Soviet Government took a political action the profound significance of which cannot be lost on anybody, and should be particularly clear to those sitting at this table. We are reluctant to note that the Governments of the Western nuclear Powers are not moving to meet that action; they are not shifting from their rigid positions. We have been given all sorts of explanations for that, but the Romanian delegation is convinced that the authentic reasons are not those which have been put forward here but are reasons of a quite different kind.

However, we too should be committing the error of not giving enough attention to the arguments put forward by the other side if we did not examine them earnestly and did not draw the necessary conclusions. For that reason I should like to deal today with certain arguments submitted by the delegations of the Western nuclear Powers in support of their position.

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At almost every meeting the Western representatives reiterate that their position is based upon "the best available scientific data", and that they "can be flexible within the rock-bottom limits imposed by the present state of scientific knowledge in seismology". I should like to make myself clear. We hold science and its achievements in high esteem; we stand for building the political line and decisions upon the advance and achievements of science. But on no account can we agree that science, and the data supplied by it, should be employed in such a manner as to justify preconceived political positions which, in the long run, flagrantly contradict the achievements of technology and science. And, even more so, we cannot agree with the attempts to substantiate political decisions with obviously erroneous scientific data.

For over four years -- from 1958 until the summer of 1962 -- the United States Government tried to justify its stand on the problems of inspection by the premise that about 700 shallow earthquakes above a magnitude of 4 or more were taking place in the Soviet Union within the space of one year. Proceeding from those data, the United States delegation, within the framework of the negotiations on the cessation of nuclear weapon tests, has constantly insisted upon the greatest possible number of on-site inspections. That was the stand of the United States delegation during the Eisenhower administration; it is the stand of the United States delegation under the present administration. On the basis of the previously-mentioned data, the Western draft treaty on the discontinuance of nuclear weapon tests of 18 April 1961 (ENDC/9) asked for twenty annual inspections. Later, on 29 May 1961, the demand was slightly altered, providing for twelve to twenty inspections (ibid.).

At that time it was claimed, just as it is claimed now, that the stand of the Western nuclear Powers was in close interdependence with the scientific data. Here is an example. On 8 May 1959 the United States representative at the negotiations stated:

"Our position has always been, however, that the level of inspections to take place must bear an appropriate relationship to scientific facts ..." (GEN/DNT/PV.89, p.6)

But what sort of scientific data was he referring to? What was the essence of the "scientific substantiation" of the stand of the United States delegation on the issue of inspections? In order to answer those questions I shall make use of an ancient

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method referred to by Aristotle -- which is to build one's reasoning upon the very arguments of the opposing party. So I shall employ the other party's data.

The hearings before the Sub-Committee of the Committee on Foreign Relations of the United States Senate in the eighty-seventh Congress -- second session of 25 July and 2 August 1962 -- on the Geneva disarmament negotiations have recently been published in Washington. During the hearings there was a report by the Director of the Arms Control and Disarmament Agency, Mr. William C. Foster, the representative of the United States in our Committee. The Chairman of the Sub-Committee was Senator Humphrey, who recently attended the proceedings in our Committee.

With your agreement, Mr. Chairman, I shall quote a portion of the interesting dialogue which took place between Senator Humphrey and Mr. William C. Foster:

"Senator HUMPHREY: There is some doubt as to the accuracy of US figures on the number of seismic events in the Soviet Union per year. There is a feeling that about four years ago there was an arithmetical error made by US scientists which made the figure much larger than the facts warranted. Is this what you were referring to in your statement -- the fact that we had made some miscalculations on seismic events?

"Mr. FOSTER: Yes, I am not sure it was arithmetical, but this was the effect of it. There was a conversion factor introduced, which indicated that there have been many more seismic events take place than the actual records which have been kept now for the last three or four years would indicate. And that is the basis of reducing from some 600 in the shallow earthquakes to perhaps 175.

"Senator HUMPHREY: Why was such a monumental error made? This isn't as if you were off two or three points. What caused that, Mr. Foster?

"Mr. FOSTER: I don't think at that point in time we had the ability to make the actual reporting with the same sensitivity. And I think it was based on the use of the best theoretical -- the

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best records at that time, which were taken in 1932 and 1936, as I recall it, of events that took place in the Soviet Union.

"Senator HUMPHREY: In other words, we were basing our calculations in 1958 and 1959 and 1960 upon records that were accumulated from 1932 to 1936. Is that what this Government was predicating its proposals upon?

"Mr. FOSTER: Not entirely. But that was used as one of the basic factors in the theoretical calculations. We are basing the records of the large shots on current records, and then extrapolating from those large shots to the smaller shots, and it is in that extrapolation that the error crept in and had this effect of magnifying the number of actual shots which later records indicated to be in error.

"Senator HUMPHREY: I am sure we made a lot of miscalculations around that time. We magnified the number of earthquakes and we magnified the so-called missile gap.

"Mr. FOSTER: Yes sir.

"Senator HUMPHREY: I think we ought to find out about the magnifiers."

This dialogue is of a high significance for our debates. It renders evident some undeniable conclusions, whose weight is all the more important as they were disclosed by persons of consequence in the United States Congress and Administration. By the way, here we witness a full coincidence of views between the representatives of the legislative and of the executive powers in the United States.

In my opinion the conclusions are as follows:

(1) in substantiating its stand on one of the most burning issues of the post-war period -- the problem of the cessation of nuclear weapon tests -- the United States Government for more than four years has operated with data accumulated during the period between 1932 and 1936;

(2) not only is it recognized that we are confronted with an error in calculation, but it is admitted that it was "a monumental error";

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(3) it is not a case of conciliating political and scientific factors; it is simply a case of constructing a political stand upon erroneous data,

(4) we are witnessing here an explicit acknowledgement of large-scale distortions.

Such distortions have also appeared in other respects. We were told of that in no ambiguous terms by Senator Anderson at the same meeting of the Sub-Committee. Here are Senator Anderson's words as recorded on page 15 of the same document:

"We over-estimated the number of seismic events in the Russian territory and we sharply marked down our ability to detect underground. When the first underground shot was held, the press was told that it couldn't be heard more than 500 miles -- even though it was recorded up in Alaska, 2,300 miles away. That story got out and we had a little hearing on it in the Joint Committee. You say that the April 13 treaty^{1/} is the least desirable from the United States point of view. I agree with that completely, the treaty of April 13, 1961, because it was based on this same erroneous information which now makes it look a little silly.

"We criticized Tsarapkin very sharply for saying that they might permit the number of treaty inspections in Russia they proposed (Deleted). We were asking for 20. So he now is in a position of saying he was really more right than we were."

So much for the stand the United States delegation took in the past, a position to which it has adhered for over four years and which prevailed during the greater part of our negotiations. Thus agreement has been blocked.

Now a few words about the present. I intend to go on using the data put forward during the Senate hearings of July and August 1962. In the United States it is at present acknowledged that the number of doubtful seismic events on the territory of the Soviet Union does not amount to 700, but to 170 a year. About one-half of this number of 170 are eliminated from calculations as being too deep for it to be possible for them to be nuclear explosions. A few of the remaining ones can be identified as earthquakes by the use of other criteria, primarily by identifying the direction of the first motion of the given seismic event.

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"This" -- Mr. Foster concludes -- "would leave less than 75 events which control posts located outside the Soviet Union could not identify. Most of those would be concentrated in a very small area in the USSR; that is, in the area of the Kamchatka Peninsula."

I stress that here I have quoted Mr. Foster's opinion, voiced during the same above-mentioned hearings, and not my own view. As far as I am concerned I have shown that the national detection and identification posts of the USSR and the United States, to which there are to be added the national posts of their allies plus, in the event of an agreement being reached, the national posts of the neutral States, plus three automatic seismic stations on the territory of each nuclear Power, plus the automatic stations located on neighbouring territories -- all those posts taken together -- would be more than sufficient for all verification requirements. But in order to follow up the trend of the argument we shall make further reference to the data submitted by the United States side; though I must confess that, after more than four years during which we have been countered by proposals based upon erroneous data and calculations, we cannot be at all certain that the figures specified today by the United States delegation are real ones.

So let us proceed from the number of seventy-five unidentified seismic events on the territory of the Soviet Union. In the past, when the starting-point was 700 seismic events a year on the territory of the USSR, the United States delegation asked for twelve to twenty annual inspections. What would be the corresponding number of inspections were we to start from the figure of seventy-five? That is a question of plain arithmetic. If twelve to twenty inspections were demanded for 700 events, for seventy-five events the corresponding number would be about 1.3 to 2.1 inspections a year. By accepting two or three annual inspections the Soviet Union went beyond the margin imposed by calculations based on United States data.

The Western nuclear Powers were still demanding eight to ten inspections then, and now they are asking for seven inspections. Neither of those figures is in accordance with the new scientific data disclosed before the Senate Sub-Committee. Hence, naturally, the impression is given that by submitting such exaggerated demands with regard to the number of inspections, which is reduced by one from time to time by a bargaining alien to the spirit of negotiation, it is intended to create a semblance of flexibility and of concessions.

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With regard to those "concessions", may I be allowed to quote another fragment from the statement made by Mr. Humphrey during the same hearings? Again speaking of the error that we have already mentioned, Mr. Humphrey said:

"The reason I mention this is every time I pick up a paper, ... I read about the 'concessions' that we are making, which has the effect with the public of saying, What's the matter with this administration, this Government, this country of ours -- conceding to the Russians?"

"It would be like this. If you found that it required 100,000 units of penicillin to check pneumonia, and you had been giving 1 million units of penicillin or 500,000 units of penicillin to check pneumonia, I suppose then we should say the doctors are making a concession to pneumonia. This would be the same kind of logic.

"The fact of the matter is, it is not a concession."

Those are words which spare me any effort of making further comments.

I have spoken today in order to show once more that the problem facing us is a political one and that the time is ripe to set aside the argument that the technical aspect is the one which prevents us from moving forward. The United States delegation endeavoured to convince us of the contrary, but let us admit in all fairness that it has not convinced us. The facts, reality itself, did not support its stand. And obviously enough, nobody can go against the logic of facts or against reality.

The negotiations on the cessation of nuclear weapon tests have lasted only too long. We have no right here to waste time and energy, but we must not lose hope either, nor can we admit that there is nothing to be done. In the view of the Romanian delegation, it is now the turn of the United States Government to make the necessary move in order that we may proceed swiftly to the conclusion of the agreement. That is why this Committee is entitled to request the United States delegation to submit to its Government the situation as it exists, to show that the prevailing opinion in this Committee is that the agreement can be concluded, under the well-known conditions, without the interests of any State being jeopardized; that there is unanimous consent about the agreement being an absolute and urgent necessity.

As I have already stated on another occasion, there should be no victor and no vanquished in this Conference. The point is not to undermine the prestige of one country or another, of one government or another. The point is that we have to find

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together the best solution for the intricate issue facing us today, but in order to achieve that goal all the governments represented here must give proof of their courage to take action and of their determination to solve the problem. The Government of the Soviet Union has given that proof. It is now up to the United States Government.

Mr. STELLE (United States of America): I welcomed evidence of the close and studious care which the representative of Romania gives to the publications of the United States Government on this subject, and I hope he will continue to follow them with equal care. I welcomed also the willingness of the representative of Romania to engage in this Conference in discussions of the important technical basis which in our view must be taken into account in arriving at an agreement on a treaty to ban nuclear tests -- particularly since his Soviet colleague has strenuously avoided any such discussion, even in general terms. I hope that the statement of the Romanian representative this morning means that his colleague, the Soviet representative, is now prepared to enter into discussions, which he has so far eschewed, of at least the general technical framework which must be the basis of any sound nuclear test ban treaty.

As for the particular quotations which the Romanian representative gave from the hearings before the Senate Committee, I have not the text at hand, but I believe they are familiar and I believe they are accurate. But he spoke in terms of the United States position as having rested completely on, I think he said, data from 1932 to 1936 during the period 1958, 1959, 1960 and a large part of 1961.

I think we need to recall a little history. As I said at our informal meeting on Monday, the scientific position, the calculations, which the United States delegation to the 1953 Conference of Experts put forward, rested upon the data from the experience of one nuclear test underground, the Rainier shot. At the time the Conference of Experts met, that was the only underground nuclear test. Now earthquakes are one thing, underground nuclear tests are another. The experience -- and this is what I assume is referred to in 1932 to 1936 -- was a count of earthquakes, mainly earthquakes of large magnitude; roughly, I believe, magnitude 6 on the Gutenberg-Richter scale. We think of nuclear explosions as being explosions of great yield, and of course

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they are; but compared with the force of the kind of earthquake which seismologists have been monitoring over the past decades an underground nuclear shot is really of relatively small energy.

The scientific problem, therefore, was to project from the known data on earthquakes of large magnitude what the seismic magnitude would be of nuclear explosions of very small yield, and then to project what the number of earthquakes of that relatively small magnitude would be which would normally occur -- with, of course, fluctuations from year to year -- in the territory of the Soviet Union. In that projection were theoretical calculations which in 1953 were based on one shot.

Shortly after the political conference convened in the autumn of 1953, the data from another series of underground nuclear shots, undertaken before we entered into a unilateral moratorium in the autumn of 1953, became available to us. Those data, on analysis, moved things in what might be said to be the wrong direction. I am not equipped, and I do not think it right now, to go into the kind of scientific detail which our scientists might well discuss-- first motion, the various ways in which waves showed up, and so on. But they seemed to indicate rather decisively, on the basis of the data then available -- this was now data from one shot and from the so-called Hardtack series -- that the calculations and estimates which had been made with regard to the capacity of the system, which had been recommended on the basis of that one Rainier shot, were not as great as they should have been, and in fact that the number of unidentified events might go up by a factor of perhaps ten. We published that information in, I believe, January 1959. It is what was historically referred to as "the new data" (GEN/DNT/25).

I should like to point out to the Committee that until after the Soviet resumption of nuclear tests in 1961 the United States conducted no more nuclear test explosions underground. In other words, as far as nuclear shots were concerned the data in hand when the political conference began in 1953 was the total of the data that we had to go on as far as new experience in underground nuclear tests and seismic effects of them went. It was not, therefore, until the autumn of 1961, when we resumed underground nuclear test explosions, that we had any more new data. We immediately began to analyse the data as it came in and this time, fortunately, the data moved the problem in the right direction rather than in the wrong direction. Again we published the results, and it will be recalled that on 7 July 1962 there

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was an announcement of the results of the Vela Project, the very large research programme which had now had the advantage of numerous new experiences and considerable new data on the seismic effects of underground nuclear explosions (ENDC/45).

In that document the specific point which the Romanian representative mentioned this morning was referred to -- that we believed, on the basis of those data and of a new conversion factor, made possible by them that the number of events that we were talking about was materially reduced. Therefore, it is not a question of operating on the basis of old data in error. It has been a question of operating on the data that we had at hand, and with the most precise accuracy that could be developed on the basis of that data.

We continue to ask our Soviet colleagues either to bring their scientists here or to sit down with our scientists at any place of their choosing and to go over the data that has been made available to us by our considerably increased experience in testing underground. We have always proceeded on the basis of the data that were at hand. At the beginning of the negotiations they were very, very limited; but our research on the basis of a considerably greater number of experiences now is naturally very much more refined, and happily it has been possible, on the basis of those scientific data, to adjust downwards the number of on-site inspections which we believe are required for the sound operation of a nuclear test ban treaty.

Today my delegation would like to set out in some detail some of the reasons why we believe that the major questions of the procedures of on-site inspection and the number of on-site inspections should be discussed in **conjunction** or in parallel. The Soviet Union has made claims about the efficacy of national systems of control. A discussion of those systems, together with the question of on-site inspection, **presents** certain interesting contrasts of positions and is a logical starting point for an examination of some of the important issues we face in this Conference.

The Soviet Union is now offering the West three inspections annually in the Soviet Union. Yet at the same time it insists that **existing** national systems will, by themselves, reveal the nature of each recorded **seismic** event. In other words, therefore, the Soviet Union professes to believe that there will be no unidentified events. That seems to mean that the Soviet Union is offering to let us inspect events that will already have been identified. Are we to be allowed to investigate only events which will be positively known before hand to be

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earthquakes? Obviously no one has ever proposed such a result, least of all the United States. Yet what else are we to think from Mr. Kuznetsov's and Mr. Tsarapkin's expositions of the situation?

It is for reasons such as that that we are convinced that it is highly important to discuss just what the Soviet Union has in mind when it speaks of allowing inspections on its territory a few times a year. If the Soviet delegation excludes the possibility of unidentified events, then on what basis is it proposing that an inspection should be initiated? What is it that is to be inspected, and for what purpose? Who is to decide that, and by what standards? Where is it to take place, and under what conditions? Who is to do it? That is particularly true in connexion with Mr. Tsarapkin's emphasis on agreeing to some criterion by which events would be selected for inspection. But if all events, according to the Soviet thesis, are going to be identified by the national systems, of what use will such a criterion be?

The representative of the Soviet Union would have us all think that those are mere technical or organizational details; but it seems clear to us that they go to the heart of our problem here. In reaching that conclusion we are fortified by what we know of the past history of test-ban negotiations on these items, and in a moment I shall mention some pertinent historical facts in that regard. What is more interesting is that Mr. Tsarapkin has told us repeatedly that those issues could be discussed tomorrow if the West would only agree to Soviet numbers of inspections and Soviet numbers of automatic stations. It would seem, then, that the Soviet Union must already have a well worked out position on all those issues -- a position, however, which it is unwilling to discuss until the West has capitulated on a number of on-site inspections so small as to be an ineffective deterrent, a number which the Soviet Union knows is unacceptable to the United States.

Let us take the question of determining in what sort of circumstances an event is to be eligible for inspection. Our discussions with the Soviet Union from 1958 through 1961 seemed to bring us to an agreement in principle that inspections could be held only in regard to those seismic events which had been detected under certain agreed rules for detection, for location and for identification. All those rules were referred to as criteria, and debates on the exact rules or criteria fill scores of pages of the records of the Conference on the Discontinuance of Nuclear Weapon Tests. It is quite evident that the criteria for establishing the eligibility

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of an event for inspection are of major importance in judging whether or not the agreed inspection arrangements are going to provide an effective deterrent to secret violations of the treaty. If the criteria are so restrictive that only a tiny portion of the annual number of unidentified seismic events actually becomes eligible to be chosen for inspection within the quota, then the element of selective choice is totally removed from the system. There would no longer be the major factor of uncertainty for each nuclear side about just which few unidentified seismic events the other side might decide to select for inspection.

It is a fact that some of the criteria proposed to us by Soviet experts late in 1959 were so restrictive that, when applied to the seismological recordings from some of the United States underground tests conducted in Nevada in the autumn of 1958, they would not have even classed those admitted nuclear tests as seismic events eligible for inspection. When the absurdity of that situation was explained to the present representative of the Soviet Union, Mr. Tsarapkin, in January 1960, he told us, at the one hundred and fifty-second meeting of the Conference on the Discontinuance of Nuclear Weapon Tests:

"These fears are baseless, because we have not required and will not require that the criteria should be so strict as not to allow of the

party concerned carrying out its quota of inspections." (GEN/DNT/PV.152, p.19)

Of course, that was beside the point. Any set of criteria which would have made the number of eligible events just equal to the quota of inspections, by arbitrarily eliminating the great bulk of the seismic events which should have been eligible for inspection, would have eliminated any possibility of selection and, hence, of deterrent effect.

The Soviet Government, a month later, appeared to have seen that its position was untenable, and at the meeting of that Conference on 16 February 1960 Mr. Tsarapkin announced (GEN/DNT/PV.172, pp.6, 7) that the Soviet Union was now ready to adopt criteria suggested earlier by the United States, with the addition of one short paragraph. As it turned out, that one short supplementary paragraph, in our view, posed an insuperable scientific condition to declaring more than a few unidentified events, if indeed any at all, to be eligible for on-site inspection within the quota.

That issue remained unresolved through all the rest of 1960 and all of 1961. We still have no way of knowing whether the Soviet Union has reverted to its 1959

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position, whether it may still be advocating its 1960 and 1961 position, or whether it has some entirely new approach to this matter. Yet anyone can see that the resolution of the mere question of the number of inspections per year is almost immaterial without an understanding of what seismic events will be eligible for inspection.

A related problem concerns the human agency designated to make the decisions about whether, in the case of a particular seismic event, the agreed criteria for detection, location and identification have or have not been met. In 1961 the Soviet delegation appeared, most of the time, to be contending that that determination should be in the hands of a group of three officials, representing respectively the West, the Soviet Union and neutral States, which had to come to a unanimous decision in each case. That was, of course, the so-called troika scheme which was advocated in Geneva as well as in New York. Quite naturally we in the West are very much interested to learn the current Soviet position on that question, which can have the most direct bearing on whether inspections will be at all useful as a control measure.

In fact the entire Soviet position on the problem of vetoes over control operations is still unclarified. In the early days of the test-ban Conference, the Soviet Union submitted a list (GEN/DNT/29) of major topics on which it was to have veto rights. One of them was the right to veto any request by the other nuclear side to conduct an on-site inspection on Soviet territory. The idea of an annual quota of inspections was invented to get around that very demand by the Soviet Union for a veto, and so it seemed to do until the troika plan of 1961 was put forward.

Moreover, quite apart from that veto, and even if the Soviet Union has, as we must hope, dropped its troika demand here, we are still uninformed about the Soviet position on other major aspects of inspection. For example, in 1961 the Soviet Union seemed to be saying that, although one nuclear side could call for the conducting of an inspection of an eligible seismic event on the territory of the other, the actual decision in each case had to be taken by the international commission. As the Committee knows, the West has always insisted that the actual decision should be left to the other nuclear side, since only a small fraction of all eligible seismic events are actually going to be made the objects of on-site inspection. In other words, a **truly** safeguarded adversary, or reciprocal,

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procedure would guarantee the most satisfactory application of whatever inspections are available as an effective deterrent. In addition there would be some simplification in the size and some reduction of the expense of the control system. Here again we ask where the Soviet Union now stands.

Similarly, there is a long history of disagreement about the area that should be subject to inspection. It can easily be seen that the efficacy of on-site inspection is directly tied to the area open to search by the inspection team. The size of the area is linked closely to whether a larger or smaller number of inspections will be necessary to provide an effective deterrent to violations; for much depends on whether we have scientific assurance that, for example, there is a 90 per cent probability that the selected epicentre will actually fall into the inspection area or whether, if the area is smaller, there might be only a 20 per cent probability of the epicentre's falling into the selected area. The size of the area to be inspected will certainly affect the probability that the epicentre of a particular event will actually be inside the inspection area. That probability will, in turn, have much to do with the number of on-site inspections which will constitute an effective deterrent against violation. Nevertheless, on that score also, we have at this time no information whatsoever about the Soviet position.

The same can be said of the Soviet position on the composition by nationality of inspection teams. In the past the Soviet Union has never deviated from the requirement that the head of the team and at least one-half of all the technical specialists on the team should be nationals of the country on whose territory the inspection is to take place. For our part, we have never ceased to call that approach unacceptable, since it would involve the employment of citizens to investigate their own country, which might possibly have been guilty of violating a solemn international obligation. That would amount to self-inspection and could destroy international confidence in the entire inspection process and the deterrent effect of a small number of on-site inspections. Yet the Soviet delegation refuses to enlighten us on that vital question of inspection as well as on all the others, except the single matter of the annual number of inspections.

The United States delegation, of course, has no desire to avoid the question of the number of inspections, and we have not avoided it. As system capabilities have improved in the detection and identification of seismic events, we have

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steadily lowered the number of inspections requested from almost all unidentified events to 20 of a yield above a scale of seismic magnitude of 4.75, next to from 12 to 20 of the same kind of events, then from 12 to 20 without a threshold, and more recently to from 8 to 10, and finally to 7, conditional on agreement to certain inspection arrangements. The Soviet Union, for its part, has never deviated from 3, except of course by going to zero.

However, we cannot view this one item in complete isolation from all the other factors relevant to on-site inspection, for those factors will tell us whether the number we agree upon with the Soviet Union is going to be valuable or worthless as a vital element in the system of verifying the observance of a test-ban treaty. And, as we explained at the meeting on 25 February (ENDC/PV.102), that is why my delegation has made clear that the United States believes that, if we could get agreement on satisfactory arrangements and procedures on those other essential matters, agreement would be easier on the annual quota number of inspections.

Frankly, we are now somewhat at a loss about how to proceed on this question if our negotiating partners refuse to discuss most of the important unresolved questions, and pose an ultimatum on the one issue which they will discuss. We have studied carefully all the procedural suggestions made in the past weeks by the delegations of the United Arab Republic, India, Sweden, Ethiopia, Nigeria and Brazil, and we should be quite willing to try any of the ways they suggest to get our negotiations moving again. I thought I heard the representative of Burma this morning put forward the opinion that it would be difficult to reach agreement on numbers without some general agreement or understanding on the fundamental problems of the nature and conduct of inspections (Supra, p.10). We for our part continue to think that the nuclear Sub-Committee could provide a very useful forum for the discussion of all those major points without impeding the work of the plenary meetings either on a test ban or on other issues which we believe are important. Naturally, nothing that we suggest is intended in any way to replace co-Chairmen's meetings or even more informal meetings whenever they might be appropriate.

Now, as so often in the past history of these talks, and perhaps even more now, the fundamental requirement is for the demonstration of some flexibility on the part of the Soviet Union to match Western reasonableness. That flexibility should involve both procedural and substantive matters. The standards which have guided the

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formulation of the United States position are clear, and we believe they are clear to all. We have long since made the political decision that we wanted a nuclear test ban agreement. Years ago, also, we decided that the control system need not be, in fact could not be, 100 per cent perfect, but could and should be reasonably adequate and effective. We base our judgement of what is reasonable control on what we believe will create a sufficient risk of disclosure to any potential violator to deter it from violation. In determining what constitutes a sufficient risk we have, for our part, necessarily taken into account technical factors relating to seismic events as well as the political and organizational arrangements that may be worked out.

We feel that we have proceeded and are proceeding in an open and rational way to arrive at the terms for a reasonable agreement. We frankly do not believe that the same can be said for the Soviet Union and its highly arbitrary stand on many issues both of substance and of procedure. We earnestly urge our Soviet colleagues to review their positions and, if necessary, to seek the requisite authority from their Government, so that we can progress, and progress rapidly, first to negotiation and then to agreement.

Mr. BLUSZTAJN (Poland) (translation from French): The debate on the question of the prohibition of nuclear tests has brought out sharply several questions of principle to which the Polish delegation would like to revert once more.

It seems to us that first and foremost we must determine the exact part to be played by national systems of control and automatic seismic stations within the framework of a future agreement on the cessation of tests. Although we note that the United States and the other Western Powers are prepared to regard national systems as the primary element of control, it seems to us that the representatives of those countries are not always disposed to accept all the consequences which derive from this. The position of the socialist countries on this question is quite clear. We consider that the national control stations at the disposal of the nuclear Powers are sufficient to ensure the observance of the treaty. However, taking into account the attitude of the Western Powers, we have agreed to the installation of a whole system of control comprising several constituent elements and capable in our opinion of satisfying all requirements.

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Thus the parties to the treaty will not be obliged to rely solely upon their national stations. They will also have at their disposal the recordings of the network of stations belonging to the opposite side, and they will be able to make use of the results of work carried out by stations situated on the territory of third countries. May I take this opportunity of telling the Indian representative, Mr. Lall, that we have always attached the greatest importance to the proposals which have been submitted here and to the suggestions put forward by certain representatives, in particular by the Swedish delegation, on this subject?

It seems to me that no one has expressed any doubt of the ability of the national systems of the nuclear Powers to detect and identify seismic phenomena which occur upon their own territory. For example, Mr. Foster said in his statement of 1 March 1963:

"It is, of course, obvious that the Soviet Union is able to know whether seismic events on its own soil are earthquakes..." (ENDC/PV.104, p.17)

I am sure that the same is true for the United States. Previously the representatives of the Western Powers cast doubt upon the authenticity of data which did not originate from their own stations. It was said, for example, that data from national stations could be falsified in order to conceal a clandestine underground nuclear test. Today these arguments are no longer repeated in public, since their absurdity is too obvious. However, the attempts to undermine confidence in the recordings of stations belonging to the opposite side have not yet been entirely abandoned. It is a kind of obsession which keeps on reappearing in our discussions. That is why we propose the installation of automatic seismic stations which would act as permanent and objective controllers of the work of national control stations and would put an end to these attempts.

On this point I should like to refer to the statement of the Soviet representative who made the following remarks at our meeting of 22 February:

"... automatic seismic stations placed at three points -- which apparently have already been agreed upon -- in the territory of the Soviet Union and in the territory of the United States, in conjunction with other seismic stations in the territories of States bordering on the seismic zones of the Soviet Union and the United States, would constitute adequate means for dispelling any possible doubts felt by the other side concerning the proper functioning of national networks of seismic stations." (ENDC/PV.103, p.24)

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This conception of the relationship between the systems of national stations and the automatic stations should dispel all possible doubts concerning the complete and objective nature of the data which the international centre envisaged in our control system would receive from the States signatories of the treaty.

For these reasons we are of the opinion that the statements of the United States representatives to the effect that they would not have complete data on the nature of underground phenomena occurring in the territory of the Soviet Union cannot be taken seriously. With the control system which we are proposing -- a system comprising national stations situated on the territory of the nuclear Powers, plus stations situated on the territory of third parties, plus automatic seismic stations there should not in practice be any unidentified phenomena. For once I am happy to note here my agreement with the United States representative, Mr. Stelle. However, Mr. Stelle, I do not think that this phenomenon should disturb us. On the contrary, we should be glad that we are now in a position to implement a system of control which for all practical purposes will reduce the unidentified phenomena to zero. On the basis of these premises we are entitled to affirm that national control systems conceived in this fashion will amply suffice to ensure the enforcement of the nuclear test-ban treaty.

The West contests the validity of this thesis and is demanding numerous on-site inspections. In support of this demand, attempts are made to invoke scientific arguments. That is the favourite subject of the United Kingdom representative, Mr. Godber. Thus on 27 February Mr. Godber said:

"The Western position, of course, is quite clear in that it is based on the best scientific evaluation available to us. It is based, of course, to some degree on a political approach, because the very fact of the acceptance of a quota is a political decision, just as the determination to make a particular inspection from a quota must also be a political decision; but the basis on which this has been evaluated is a scientific basis of the number of events which we believe still to be unidentifiable in a particular region." (ENDC/PV.103, pp. 29, 30)

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However, it must be noted that in several statements made by United States representatives during the last few days, concern for scientific accuracy has not been as conspicuous as it used to be. Indeed, the United States delegation is now trying to link the number of inspections to completely different criteria. Thus on 25 February, the United States representative said:

"... the United States did not insist upon eight to ten on-site inspections as its immutable, rock-bottom figure. We have felt, however, that the number is somewhat irrelevant" --

I should like once more to emphasize this expression: "the number is somewhat irrelevant" -- I think Mr. Stelle repeated this remark in his statement today (supra, p.23) --

"unless and until it is placed within the context of a system which would make each inspection effective and reliable." (ENDC/PV.102, p.23)

On 1 March, Mr. Foster asked:

"How can we tell that an annual quota of inspections would be adequate unless we know how meaningful each inspection would be?" (ENDC/PV.104, p.18)

We are within our rights, I think, in deducing from these two statements by the United States representative that the United States is putting forward a new criterion to serve as a basis for deciding the number of on-site inspections, namely the criterion of the quality and content of the inspection. We are also entitled to conclude that in the United States delegation's opinion the number of inspections should be inversely proportional to their quality.

I should also like to quote another argument which has been put forward in the discussion to justify a large number of on-site inspections: the argument of inspection as a deterrent. Thus the United States representative, Mr. Foster, said on 18 February:

"Under any quota, one and perhaps two inspections would have to be saved until the end of the year to provide a deterrent against tests all the year long. That means that a quota of three might well provide only one usable inspection for most of the year." (ENDC/PV.99, p.21)

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Thus, if we are to believe the statements of the Western Powers, there are three different criteria for establishing the annual quota of on-site inspections:

- (1) a scientific criterion based on the number of phenomena regarded as suspect;
- (2) a technical criterion whereby the number of inspections would depend on their content;
- (3) a political criterion based on the notion that on-site inspection should act as a deterrent.

However, it seems to me that the opinions of the Western delegates which I have just quoted entirely justify the assertion that in fact the West has itself abandoned the scientific criterion. How otherwise can one explain the progressive reduction in the number of on-site inspections demanded by the United States and United Kingdom delegations? How otherwise can one explain the fact that what yesterday constituted an expression of the strictest scientific thought has become today the object of the most vulgar bargaining? Are we to conclude that Western science provides new factors at such an amazing speed?

I should like to give the Western delegations the benefit of the doubt and to meet them on their own ground. I can understand at a pinch that over a period of time the number could be reduced gradually from between 12 and 20 to between 8 and 10, taking as a basis the results of experiments carried out between the Rainier experiment and the Vela project; but how is it possible in a period of no more than four weeks to reduce the number from between 8 and 10 to 7 on the basis of new scientific data? That is beyond my understanding. I can see that the United States delegation may have come to the conclusion that it is now prepared to accept a greater degree of risk; but if so, I think we have left the scientific field altogether to enter the purely political field.

At all events we note that science, so dear to Mr. Godber, has made remarkable progress. However, we believe that the Western Powers would do well to give it another gentle push in the right direction. They are quite capable of doing so. As for science, genuine science, we need not worry. It will not suffer. Quite the contrary.

But I think that the most striking proof of the West's abandonment of the scientific criterion is provided by the fact that the Western Powers have

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themselves linked this criterion to other technical criteria by making the number of inspections depend upon their content. By acting in this way, the Western delegations have in fact abandoned completely the sphere of objective scientific analysis and have entered a field which can easily be dominated by arbitrary subjectivism.

Allow me on this question to say a few words concerning the statement made by the Burmese representative, Mr. Barrington, this morning. Although I usually share our Burmese colleague's views, I cannot follow him when he says that we should do well to accept now a discussion on procedural and technical data concerning on-site inspections (supra, p. 10). As I have just said, it seems to me that these so-called technical criteria can easily lead us into a field which can be dominated by an arbitrary subjectivism.

I shall perhaps have more to say on this subject after studying the statement made today by the United States representative. It seems to me that it is not in the Conference's interests to enlarge the field of the debate, because by doing so we could easily enlarge the field of our disagreements. Moreover, I wish to stress an idea which seems to me relevant in this connexion. We believe that the number of inspections should primarily, if not exclusively, be related to the efficiency of the control system which we wish to set up. It is upon this that the number of inspections can and must depend, and not upon the procedure and the techniques used for carrying them out.

We are convinced that the West is considering the problem of the number of on-site inspections exclusively upon a political basis. If it were merely a question of inspections as a deterrent, we should certainly not have so many difficulties with this problem. It would have been easy to prove that two or three inspections per year were amply sufficient to fulfil that function. Last week we had the opportunity of quoting in that connexion (ENDC/PV.102, p.17) our Indian colleague Mr. Lall, who, citing the opinions of scientists who met last autumn in England, said that even one on-site inspection per year would be sufficient to guarantee the observance of a treaty on the cessation of nuclear tests. However, we are forced to note that unfortunately the political criteria upon which the West bases its policy correspond to other considerations. We cannot escape the conclusion that the position of the United States and the United Kingdom in the Geneva

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negotiations reflects their international policy of continuing the armaments race and the policy of positions of strength.

We have again to draw attention to certain actions of the Western Powers which contradict the aim of our negotiations and cannot facilitate agreement on the cessation of nuclear tests. There are amongst these actions two which we find particularly disturbing.

First, we cannot fail to take into consideration the fact that the United States, in conformity with its military strategy, is continuing tests of nuclear weapons and envisages the perfecting of tactical nuclear weapons. The report presented last January by the Defense Secretary, Mr. McNamara, and also a series of other statements by American statesmen and generals, bear witness to the importance which the United States attaches to the development of new types of nuclear weapons and their "conventionalization."

Secondly, we must take into account the fact that a multilateral NATO nuclear force is being set up. The Polish delegation has already had occasion to express its opinion on this subject (ENDC/PV.102, p.18). We can only note that the events of recent days have confirmed the correctness of our views. We are witnessing more and more categorical demands by the West German Government that this multilateral nuclear force should be placed under the European command of NATO, in order that the German Government may have a greater influence upon the decisions concerning the utilization of this weapon. But that is not all. Today -- and this has been confirmed by the conversations which the Bonn Defence Minister von Hassel has just had in the United States -- Western Germany is demanding that the German army should be provided with tactical atomic weapons as well as missiles with a range of over 1500 km and armed with nuclear warheads. Thus the West German Government wishes to take advantage of the opportunities offered by current American policy to base its policy of revenge upon still more powerful military foundations.

The interests of humanity, and of the overwhelming majority of States, are that nuclear weapon tests should cease and that the danger of the spread of nuclear weapons should be eliminated. At the same time, however, there are States which, while proclaiming their desire to end nuclear tests, stop at nothing to speed up the frantic armaments race and to involve more States in that race.

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How can these two tendencies be reconciled? We are convinced that they are mutually exclusive. The Polish delegation considers that a change in policy by the Western Powers is essential. Only thus can the negotiations on the cessation of nuclear tests be rescued from deadlock and the dangerous current in which the present policy of these Powers involves us be reversed.

Mr. TARABANOV (Bulgaria)(translation from French): I should like today, on behalf of the delegation of the Bulgarian People's Republic, to make several observations on certain aspects of the problem of the cessation of nuclear tests, which is at present under discussion. This problem has remained the central preoccupation of our Conference since it resumed work.

It has been almost unanimously recognized, as indeed has been emphasized in many speeches, that never have conditions been so favourable for the conclusion of an agreement to cease nuclear tests. The representative of Burma also stressed this view during his speech this morning. An agreement of this kind would not only contribute substantially to putting an end to the nuclear arms race but, as has been generally agreed, it would give considerable impetus to the solution of the great problem of our time, general and complete disarmament.

A large number of representatives, especially among those of the non-aligned countries, have pointed out that world opinion, the peoples of the whole world, could never approve the attitude of those who failed to promote an agreement on the cessation of nuclear tests or to take advantage of the favourable conditions existing at present for the conclusion of such an agreement.

For our own part, we sympathize entirely with these very relevant considerations. Mankind will never forgive those who have not done their utmost, and especially those who by their uncompromising attitude have prevented the conclusion of a test-ban agreement — and this at a moment when the form and substance of such an agreement are in the minds of all and when its breath is already felt in the air. The peoples of the world will certainly see to it, in the words of a time-honoured saying, that everyone reaps what he has sown.

The great possibilities of the present moment can be disconcerted even in statements which have shown a certain pessimism regarding the development of our work. This pessimism has been tempered, it is true, by a feeling of reasoned

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optimism -- and that is a point which I wish to stress -- springing from the fact that, before the resumption of our work, a rapprochement had taken place between the positions of the sides towards the cessation of nuclear tests. This feeling of reasoned optimism was expressed in a striking manner by the representative of Brazil on 15 February 1963 when he made the following statement:

"As to Brazil's position -- and I feel that our way of thinking does not differ very much from that of other so-called non-aligned countries -- we consider that the concrete points of disagreement are now really small and of little significance. I would go so far as to say that the area of agreement between the two sides is very much broader than they are prepared to admit publicly. That is why we cannot readily accept a confession of failure."

(ENDC/PV.98, p.12)

In reality the basic elements of the problem are at present such that an agreement could be reached immediately if political considerations in certain Western countries did not intervene. Now that our Conference has reached a crucial point in the discussion of the problem of tests, when we have to decide whether we want to take advantage of the present favourable conditions or whether we are going to let the opportunity slip by, it is necessary to review the situation and see where we stand. This would not only be useful in enabling us to assign responsibilities in the event of failure, which we hope will not arise, but it would also give us a more exact idea -- and that is a point I wish to stress -- of what direction we should give to our efforts at this critical moment in order to reach an agreement.

On the basis of recent progress in science and technology and especially of recent advances in seismology, the Soviet Union has long maintained that the implementation of an agreement to cease nuclear tests can be controlled by means of national systems of detection and identification. Hence it is unnecessary to elaborate a special system of international control which might give rise to political complications and become a fresh cause of suspicion between States.

(Mr. Tarabanov, Bulgaria)

This contention -- that national means of detection and identification are perfectly adequate to ensure that an agreement is kept -- has been borne out by the experience of recent years. All the underground tests made by the United States, even those made with the object of demonstrating that they could not be detected or identified without international control, were not only detected but also identified by the various seismic stations throughout the world. Moreover, low-yield underground explosions which had not been announced by the Soviet Union were detected and identified not only in the United States but in several other countries as well.

But that is not all. Numerous scientists in the United States and other Western countries have long recognized the possibility of ensuring the strict observance of an agreement on the basis of data furnished by national systems and means of detection and identification. It is true that these scientists have not always belonged to the different bodies dealing with the documentation of nuclear tests or the negotiations on the cessation of tests, but none the less they are eminent scientists of international repute. Recently we have also noticed statements emanating from official circles in the United States directly concerned with questions of disarmament and especially the cessation of nuclear tests, which emphasize the potentialities of national networks.

For instance, Mr. Adrian Fisher, Assistant Director of the United States Arms Control and Disarmament Agency, was quoted by the French newspaper Le Monde as saying:

"Moreover, the United Kingdom and the United States would chiefly rely on their detection stations outside Soviet territory for detecting doubtful events. Any stations established in the Soviet Union would have only a supplementary part to play."^{1/}

This shows quite clearly that those most qualified to judge in the United States consider that national detection posts would be capable of furnishing the data necessary to ensure that an agreement to cease nuclear tests was observed.

^{1/} Translated.

(Mr. Tarabanov, Bulgaria)

We must not forget that it is not a question of United States seismic stations situated exclusively in United States territory, since a large number of United States stations are installed in countries adjacent to the Soviet Union which are allies of the United States. So far no doubtful seismic event in the Soviet Union has been recorded by these stations, and no underground nuclear test of whatever magnitude in the United States has escaped detection and identification by the national systems of the other side.

In addition to this, we have the scientific centre which would be set up to centralize and sift data furnished by national stations, and would have at its disposal the data furnished by the network of the country where a doubtful event was believed to have taken place, which as you know was provided for in the eight-nation memorandum (ENDC/28) and was accepted by the nuclear Powers. There can therefore be no possible doubt that with the technical means at the disposal of the national networks, and especially with the technical means at the disposal of all the national networks together, it would be perfectly possible to ensure that an agreement to cease nuclear tests was observed. In this connexion we must not forget the statement made by Mr. Dean, United States representative in the First Committee of the General Assembly, in his speech on 26 October 1962, to the effect that the United States was in a position to detect and identify with its own seismic stations any doubtful event occurring in its territory (A/C.1/PV.1255). The same no doubt applies to the other nuclear countries.

Furthermore, the Western delegations have pointed out in the past that any agreement on nuclear tests would entail certain risks which the Western Powers were prepared to accept. The representative of Canada, speaking of the need to reduce to a minimum the risk that a State might not honour its obligations, said during the discussion in the First Committee of the General Assembly:

"But the risk of evasion should also be balanced against the dangers mankind must live with in the absence of an agreement. If it is feared that States might sign an agreement and later conduct secret tests, the nuclear Powers must not only ask themselves whether this risk is acceptable in principle. They must also assess with equal care whether the military significance of such evasions would be greater or less than the dangers to health and security resulting from continued testing and an accelerated arms race." (A/C.1/PV.1247, pp.53-55).

(Mr. Tarabanov, Bulgaria)

To appreciate the significance and importance of this statement by the representative of Canada, we should bear in mind the recent statements made by the Assistant Director of the United States Arms Control and Disarmament Agency, Mr. Jacob Beam, who in a speech at the end of February said:

"The chances of the Soviet Union conducting a series of tests which would remain undetected are vanishingly small."

That is further confirmation that it is now possible in practice to ensure compliance with an agreement to cease nuclear tests by national means of detection and identification. Nor should it be forgotten that the remarks of the representative of Canada, Mr. Burns, on the more or less imaginary risk of clandestine explosions were made on 11 October 1962 -- that is to say, some time before the latest developments affecting the possibility of ensuring the execution of an agreement, in the form of important concessions by the Soviet Union.

It is well to recall here that the Soviet Union accepted the Joint Memorandum of the eight non-aligned Powers of 16 April 1962 almost on the day following its submission. Therefore Mr. Burns had already taken account of that fact and of the concessions made by the Soviet Union to the Western nuclear Powers in accepting that memorandum: first, an international scientific commission; second, the use for detecting and identifying doubtful events of the vast network of national seismic stations on the territories of countries other than the nuclear Powers; and third, on-site inspection by invitation where a seismic event is recorded.

In summing up the various stages through which our negotiations have passed, it should not be forgotten that that was an important concession which the Soviet Union then made. From that time on, not only the non-aligned Powers but also -- as may be seen -- Canada and other countries allied to the Western Powers pressed for the immediate conclusion of an agreement on cessation of nuclear tests on that basis -- the one proposed by the eight non-aligned Powers.

At that time, therefore, the non-aligned Powers participating in the work of this Committee, and with them all the other non-aligned Powers throughout the world, as well as a large number of countries allied to the United States and the other Western great Powers, were convinced, like the Soviet Union and

(Mr. Tarabanov, Bulgaria)

the other socialist States, that an agreement could be concluded immediately on that basis -- that is, on the basis of the memorandum. This should not be forgotten.

We have taken the liberty of recalling and emphasizing these facts because they must always be kept in mind and not forgotten, now that we are making renewed efforts to conclude an agreement on the cessation of nuclear tests. They ought to be present to the minds of all who are working sincerely today to reach an agreement banning all nuclear tests.

Since the Joint Memorandum was accepted, new concessions have been made by the Soviet Union to the Western Powers (ENDC/73), as a number of delegations here have stated. The Soviet Union has accepted the principle of compulsory on-site inspection and the number of two to three inspections a year, although in the present state of science and technology these are quite superfluous. The Soviet Union has proposed the installation of three automatic seismic stations to verify the proper functioning of the national seismic networks. The inspections and the installation and checking of the automatic seismic stations would be carried out with the participation of international scientific personnel.

Is it necessary to recall again that in the past the Western Powers have simply asked the Soviet Union to return to the positions it held before November 1961? They have said, in fact, that this was the only bar to an agreement on the cessation of tests. By its latest concessions the Soviet Union has not only gone beyond what the non-aligned Powers requested in their memorandum of April 1962 (ENDC/28); it has also granted many of the Western Powers' requests, particularly that which they consider the most important: on-site inspections.

Now new concessions are being asked from the Soviet Union. We think that these requests for concessions should be addressed elsewhere, and in this connexion we should like to recall a statement by the Chairman of the Council of Ministers of the Soviet Union, Mr. Khrushchev, in his latest speech. I have not the French text, so I will quote the statement in Russian:

(Mr. Tarabanov, Bulgaria)

(continued in Russian)

"We have agreed to certain international measures of control over the cessation of nuclear tests, including two to three inspections a year on the territory of each nuclear Power. This is a serious concession on our part, and no more should be expected of us."

(continued in French)

This statement by the Chairman of the Council of Ministers of the Soviet Union should be seriously considered, especially when we keep in mind all the concessions so far made by the Soviet Union.

We have heard today a statement by the representative of the United States, who spoke at length on technical details -- and was certainly very glad to be able to do so. That statement gave us a foretaste of the debate in which we should become involved if we risked discussing technical questions before settling the main issues. It certainly gave us a good indication of what would happen then.

We noted, however, that the first part of his statement, replying to the representative of the People's Republic of Romania, clearly demonstrated that the second part was of no value because it was based on erroneous premises laid down by United States scientists, who have very often adapted their work to the wishes of the participants in talks on the cessation of tests. If we continue in that direction and have to involve ourselves in that sort of discussion of details, we shall certainly start repeating the 1958-1961 discussion, which has so far produced nothing but disagreement. Why? Because at that time no agreement was reached on the main issues under discussion.

After these important concessions which the Soviet Union has made throughout our discussions, we should have thought that the Western Powers would show greater understanding and do what was necessary to meet the Soviet Union's position resulting from its most recent concessions. In this connexion we would recall the opinion expressed by the representative of the United Arab Republic in his statement on 18-February, when he said:

"We still think, therefore, that the Soviet offer must be the object of real appreciation on the part of the two Western partners, who should be able to match it, in token of their appreciation, by a similar spirit on their part." (ENDC/PV.99, p.11)

(Mr. Tarabanov, Bulgaria)

We consider that this invitation to the Western nuclear Powers to prove their good will in order to reach an agreement has certainly not been answered. After all the Soviet Union's concessions, it is now the Western Powers which should be asked to meet the Soviet Union so that we can arrive at an agreement as soon as possible. To ask the Soviet Union at this precise moment to make new concessions to the intransigent position of the Western nuclear Powers would not only be contrary to all logic but would also run counter to the positions adopted by the great majority of the Powers represented in this Committee when the eight-Power joint memorandum was submitted to the Conference, and to the positions adopted in the United Nations General Assembly on these questions when they were discussed there.

In these circumstances, after so many important concessions have been made by the Soviet Union, to equate them with the intransigent position of the Western nuclear Powers is not likely to further our negotiations, even in a laudable effort to try to bring the positions closer together, as the representative of India, Mr. Lall, did in his statement on 27 February (ENDC/PV.103, pp.32 et seq.).

On the contrary, the time has come to ask the Western Powers to adopt a frame of mind like that of the Soviet Union. In fact, the success of the negotiations on the cessation of nuclear tests now depends solely on the attitude the Western nuclear Powers adopt. If the Western nuclear Powers go on refusing to take the necessary political decisions, it will certainly not be possible to conclude an agreement on nuclear tests, and they will bear the blame before history.

We nevertheless express the hope that all those who sincerely desire all nuclear tests to be prohibited for ever will strive to make the Western nuclear Powers realize their responsibilities and that it is solely upon them that the solution of this vital problem for humanity now depends. On the other hand, it should not be forgotten that the success of our negotiations on the cessation of nuclear tests will also determine to a great extent the progress which the Conference will be able to make on the most important problem of our time, general and complete disarmament, the solution of which is still its main task.

The CHAIRMAN (Brazil) (translation from French): I call upon the representative of Romania, who has asked to exercise his right of reply.

Mr. MACOVESCU (Romania): In connexion with the speech made this morning by the United States representative, I should like to state the following.

First, such intentions as Mr. Stelle attributed to me at the beginning of his statement are not mine and cannot be deduced from my statement. Secondly, I note with satisfaction that the conclusions I drew have not been contested by Mr. Stelle. Thirdly, concerning the rest of the answer of the United States representative, both our statements will be reproduced in the verbatim record of this meeting and therefore representatives will be in a position to judge for themselves. If I understood Mr. Stelle aright, he thinks that the position of the United States delegation until 1962 was not based on the data collected in 1932 to 1936 or on erroneous data and calculations. I read out to the Committee statements made by Senator Humphrey, Senator Anderson and Mr. Foster to the contrary.

Mr. TEMERAKIN (Union of Soviet Socialist Republics) (translation from Russian): I decided to ask for the floor at this late hour because of the continued attempts by the Western Powers to switch the Committee's discussions to technical questions without prior agreement on the basic issues, namely the inspection quota and the number of automatic seismic stations. The United States representative, Mr. Stelle, has said again today that the figure of two to three inspections is not acceptable to the United States. If that is so, there is no point in discussing now any details relating to inspection. If the United States is prepared to agree to this quota of two or three inspections a year, which in fact was named by the United States itself, the floor for the discussion of technical problems of inspection will be open. There will then be some point in discussing these problems. Unless there is agreement on the inspection quota and the number of automatic seismic stations, it is useless to plunge into technical discussions, because in such circumstances technical discussions will only result in the emergence of new disagreements in addition to those which already exist. They would lead to the creation of new difficulties and new obstacles on the path to agreement. We have no intention of helping towards such a turn of affairs.

(Mr. Tsarapkin, USSR)

In his interesting statement this morning (Supra, pp.13 et seq.), the representative of Romania, Mr. Macovescu, cited documentary data which show very forcibly the extremely doubtful value of the scientific arguments adduced by the United States side on this specific question of control over an agreement on the prohibition of nuclear weapon tests. The scientific investigation of these problems in the United States is, as a rule, either directly or indirectly in the hands of the military authorities and the Atomic Energy Commission -- that is to say, in the hands of those who manufacture nuclear weapons and those who use them, who consequently are extremely interested in the further development and testing of nuclear weapons. This interest is becoming more intense every day, especially now that the contingent of countries using United States nuclear weapons is being intensively widened to include Western Germany and the so-called NATO multilateral nuclear force. This is a highly important fact, a direct consequence of which is that the United States scientific data in this field are tendentious, devoid of objectivity, and not infrequently simply erroneous, as the representative of Romania, Mr. Macovescu, has told us this morning. The trend of scientific research in the United States in this field is usually such as to hinder instead of help towards the conclusion of an agreement on the cessation of nuclear weapon tests.

I should like to stress very strongly that we do not refuse to discuss technical questions. We are prepared to set about discussing them at once, just as soon as we see that the United States is willing to reach agreement on the basis of compromise proposals for a quota of two to three inspections and the number of automatic seismic stations. However, unless the United States is willing to reach agreement on these basic questions on these mutually-acceptable conditions, there is no point in turning aside to technical questions.

The situation at present is apparently as follows. As the representative of Poland, Mr. Blusztajn, rightly pointed out this morning (Supra, p.32), the United States, being concerned with knocking together special NATO nuclear forces, is not prepared to come to an agreement on the prohibition of nuclear weapon tests. Not wishing to assume the responsibility for failure of the negotiations, it is looking for ways to prolong them indefinitely. Switching the Committee's work to technical discussions without prior agreement on the basic issues would provide the United States with wide opportunities for prolonging the negotiations.

(Mr. Tsarapkin, USSR)

The difficulties of the situation are obvious; but the Soviet Union will continue its efforts in the hope that the United States will, for its part, display good will, wisdom and far-sightedness, and will reconsider its attitude towards this matter and come to an agreement on the cessation of nuclear weapon tests on a mutually-acceptable compromise basis. We now have such an opportunity, such a basis, and it should not be neglected. We must not allow this opportunity to be missed. It is now for the United States, and the United States alone, to act.

The CHAIRMAN (Brazil)(translation from French): I call upon the representative of the United States, who has asked to exercise his right of reply.

Mr. STELLE (United States of America): In view of the lateness of the hour I shall be very brief.

Together with our colleague the representative of Romania, I am quite content to rest upon what the other representatives may draw from a reading of the verbatim record of our discussion this morning. But there is just one point he made which I think I must comment on. He said that my delegation did not dispute the conclusions that he drew. I should like him to rest assured that in this case silence does not mean consent.

With regard to what has just been said by the representative of the Soviet Union, unfortunately I found in it nothing new that requires reply. But I must again, for the record, say that he referred to claims that the number of two to three inspections, which the Soviet Union is now proposing, had once been named -- as I understood him from the interpretation -- by the United States. The record on that is clear. The United States has never proposed a number of two to three inspections. That number has always been unacceptable to the United States, and is unacceptable to the United States.

The representative of the Soviet Union once again, as is his wont, launched an attack on the integrity of United States scientists. He claimed that they all served the Defense Department and the Atomic Energy Commission. I should like to say only two things about that. I could sometimes wish that United States scientists were as responsive to justifications of official United States positions as they might be. But they are independent scientists: they speak their own minds

(Mr. Stelle, United States)

and they give us objective advice. Secondly, it is rather strange to attribute to the Defense Department and the Atomic Energy Commission, and to the scientists working for them, complete opposition to a nuclear test ban treaty when the Vela research programme (ENDC/45) has fortunately resulted in our being able to adjust downwards the number of on-site inspections which we believe we require, and thus to move towards the position of the Soviet Union and, we think, therefore to facilitate the conclusion of a test ban treaty when this very research programme is being conducted by the Defense Department of the United States with the assistance of the Atomic Energy Commission.

Finally, the statements of the representatives of the Soviet Union and Bulgaria that discussion of the framework of the general organizational arrangements of on-site inspections, or of the other parameters of a verification system, would only add new disagreements, are I must say a little discouraging. We had been given to believe by the representative of the Soviet Union that, once the numbers of on-site inspections were agreed, everything else would readily fall into place. If the Soviet representative believes that there are going to be major disagreements and major difficulties arising out of reaching agreement on the arrangements under which on-site inspections are conducted, or other important arrangements in the treaty, then it is certainly high time we got down to thrashing out those disagreements right away.

The Conference decided to issue the following communiqué:

"The Conference of the Eighteen-Nation Committee on Disarmament today held its one hundred and fifth plenary meeting in the Palais des Nations, Geneva, under the chairmanship of Mr. A.A. de Melo Franco, representative of Brazil.

"Statements were made by the representatives of the Soviet Union, the United States, Burma, Romania, Poland and Bulgaria.

"The next meeting of the Conference will be held on Friday, 8 March 1963, at 10.30 a.m."

The meeting rose at 1.25 p.m.